

TO DESIGN AND BUILD A MODEL OF AN AUTOMATIC MATERIAL TRANSFER

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ABSTRACT

This report is about how pulses are applied as a measuring method for a machine used in factories. It consists of researches conducted in designing a pulse generator, a pulse counter and automation as part of an entire machining process in a factory. Information about the components used in this project will be discussed in order for the reader to have a clear idea of how mainly the pulse counter works as a measuring device.

This model of automation consists of a conveyor, a pneumatic cylinder, a pneumatic valve, an LED as an indicator of a machining process, a pulse counter circuit, and a PIC is used to generate pulses.

The reason for using pulses is because the pulse frequency can be adjusted depending on the precession if the length measurement in the machining process.